RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _____ 10/588, 298

Source: _____ IFWP

Date Processed by STIC: _____ 6/17/2006

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: _10/588, 298_

CRF Edit Date: _8/17/2006_

Edited by: _DA_

____ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

____ Corrected the SEQ ID NO. Sequence numbers edited were:

_____

____ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

_____

__✓__ Deleted: ___ invalid beginning/end-of-file text ; ___ page numbers

____ Inserted mandatory headings/numeric identifiers, specifically:

_____

____ Moved responses to same line as heading/numeric identifier, specifically:

_____

____ Other:

_____
_____
_____

Revised 09/09/2003

IFWP

RAW SEQUENCE LISTING   DATE: 08/17/2006
PATENT APPLICATION: US/10/588,298   TIME: 16:15:46

Input Set : **A:\pto.da.txt**
Output Set: **N:\CRF4\08172006\J588298.raw**

```
  3 <110> APPLICANT: Duffner, Fiona
  4         Hoff, Tine
  5        ·Lundquist, Henrik
  6         Spendler, Tina
  8 <120> TITLE OF INVENTION: Xylanase
 10 <130> FILE REFERENCE: 10582-204-US
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/588,298
C--> 12 <141> CURRENT FILING DATE: 2006-08-03
 12 <160> NUMBER OF SEQ ID NOS: 8
 14 <170> SOFTWARE: PatentIn version 3.3
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 630
 18 <212> TYPE: DNA
 19 <213> ORGANISM: Paenibacillus pabuli
 22 <220> FEATURE:
 23 <221> NAME/KEY: sig_peptide
 24 <222> LOCATION: (1)..(84)
 26 <220> FEATURE:
 27 <221> NAME/KEY: CDS
 28 <222> LOCATION: (1)..(630)
 30 <220> FEATURE:
 31 <221> NAME/KEY: mat_peptide
 32 <222> LOCATION: (85)..(630)
 34 <400> SEQUENCE: 1
 35 atg ttt aaa ttc gga aaa aaa ttg tta act gtt gtc ctt gcc gct tcc      48
 36 Met Phe Lys Phe Gly Lys Lys Leu Leu Thr Val Val Leu Ala Ala Ser
 37          -25                 -20                 -15
 39 atg agt ttt ggt gta ttc gcc gct acg aca ggt gct aca gat tac tgg      96
 40 Met Ser Phe Gly Val Phe Ala Ala Thr Thr Gly Ala Thr Asp Tyr Trp
 41          -10                 -5                  -1 1
 43 cag aac tgg aca gat ggc ggg ggt act gtt aat gcc gtg aac ggt tcg     144
 44 Gln Asn Trp Thr Asp Gly Gly Gly Thr Val Asn Ala Val Asn Gly Ser
 45 5                 10                 15                 20
 47 gga gga aac tac agt gta aac tgg cag aac acg ggg aac ttt gtt gtc     192
 48 Gly Gly Asn Tyr Ser Val Asn Trp Gln Asn Thr Gly Asn Phe Val Val
 49          25                 30                 35
 51 ggt aaa ggg tgg act tac ggt aca cct aat cgt gta gtg aat tac aat     240
 52 Gly Lys Gly Trp Thr Tyr Gly Thr Pro Asn Arg Val Val Asn Tyr Asn
 53          40                 45                 50
 55 gcg ggt gta ttc tct cca tcc ggc aac gga tat ttg acg ttt tac ggg     288
 56 Ala Gly Val Phe Ser Pro Ser Gly Asn Gly Tyr Leu Thr Phe Tyr Gly
 57          55                 60                 65
 59 tgg aca cgg aat gca ctt att gaa tac tac gtg gtg gat aac tgg gga     336
```

RAW SEQUENCE LISTING   DATE: 08/17/2006
PATENT APPLICATION: US/10/588,298   TIME: 16:15:46

Input Set : A:\pto.da.txt
Output Set: N:\CRF4\08172006\J588298.raw

```
60 Trp Thr Arg Asn Ala Leu Ile Glu Tyr Tyr Val Val Asp Asn Trp Gly
61      70              75              80
63 aca tac cgg cca acc gga aca tac aaa ggc aca gta acc agt gat ggt       384
64 Thr Tyr Arg Pro Thr Gly Thr Tyr Lys Gly Thr Val Thr Ser Asp Gly
65 85              90              95              100
67 ggc aca tat gac atc tat act acg atg aga tac aat cag cca tcc att       432
68 Gly Thr Tyr Asp Ile Tyr Thr Thr Met Arg Tyr Asn Gln Pro Ser Ile
69                  105              110              115
71 gac ggg tat tca aca ttc ccg caa tac tgg agt gtt aga caa tcc aaa       480
72 Asp Gly Tyr Ser Thr Phe Pro Gln Tyr Trp Ser Val Arg Gln Ser Lys
73              120              125              130
75 cgt cca atc ggt gta aat tcc caa att acg ttc cag aat cac gta aat       528
76 Arg Pro Ile Gly Val Asn Ser Gln Ile Thr Phe Gln Asn His Val Asn
77              135              140              145
79 gcg tgg gcg agc aag ggc atg tac ttg ggt aac agc tgg tcc tat caa       576
80 Ala Trp Ala Ser Lys Gly Met Tyr Leu Gly Asn Ser Trp Ser Tyr Gln
81      150              155              160
83 gtg atg gcc acc gaa gga tat caa agt agc ggt agt tcg aat gtg act       624
84 Val Met Ala Thr Glu Gly Tyr Gln Ser Ser Gly Ser Ser Asn Val Thr
85 165              170              175              180
87 gtt tgg                                                               630
88 Val Trp
92 <210> SEQ ID NO: 2
93 <211> LENGTH: 210
94 <212> TYPE: PRT
95 <213> ORGANISM: Paenibacillus pabuli
97 <400> SEQUENCE: 2
99 Met Phe Lys Phe Gly Lys Lys Leu Leu Thr Val Val Leu Ala Ala Ser
100              -25              -20              -15
103 Met Ser Phe Gly Val Phe Ala Ala Thr Thr Gly Ala Thr Asp Tyr Trp
104          -10              -5              -1  1
107 Gln Asn Trp Thr Asp Gly Gly Gly Thr Val Asn Ala Val Asn Gly Ser
108 5              10              15              20
111 Gly Gly Asn Tyr Ser Val Asn Trp Gln Asn Thr Gly Asn Phe Val Val
112              25              30              35
115 Gly Lys Gly Trp Thr Tyr Gly Thr Pro Asn Arg Val Val Asn Tyr Asn
116          40              45              50
119 Ala Gly Val Phe Ser Pro Ser Gly Asn Gly Tyr Leu Thr Phe Tyr Gly
120          55              60              65
123 Trp Thr Arg Asn Ala Leu Ile Glu Tyr Tyr Val Val Asp Asn Trp Gly
124      70              75              80
127 Thr Tyr Arg Pro Thr Gly Thr Tyr Lys Gly Thr Val Thr Ser Asp Gly
128 85              90              95              100
131 Gly Thr Tyr Asp Ile Tyr Thr Thr Met Arg Tyr Asn Gln Pro Ser Ile
132              105              110              115
135 Asp Gly Tyr Ser Thr Phe Pro Gln Tyr Trp Ser Val Arg Gln Ser Lys
136              120              125              130
139 Arg Pro Ile Gly Val Asn Ser Gln Ile Thr Phe Gln Asn His Val Asn
140          135              140              145
```

```
143 Ala Trp Ala Ser Lys Gly Met Tyr Leu Gly Asn Ser Trp Ser Tyr Gln
144     150             155             160
147 Val Met Ala Thr Glu Gly Tyr Gln Ser Ser Gly Ser Ser Asn Val Thr
148 165             170             175             180
151 Val Trp
155 <210> SEQ ID NO: 3
156 <211> LENGTH: 48
157 <212> TYPE: DNA
158 <213> ORGANISM: Artificial
160 <220> FEATURE:
161 <223> OTHER INFORMATION: Primer oth62
163 <400> SEQUENCE: 3
164 gttcatcgat cgcatcggct acagattact ggcagaactg gacagatg              48
167 <210> SEQ ID NO: 4
168 <211> LENGTH: 49
169 <212> TYPE: DNA
170 <213> ORGANISM: Artificial
172 <220> FEATURE:
173 <223> OTHER INFORMATION: Primer oth63
175 <400> SEQUENCE: 4
176 ggagcggatt gaacatgcga ttaccaaaca gtcacattcg aactaccgc             49
179 <210> SEQ ID NO: 5
180 <211> LENGTH: 21
181 <212> TYPE: DNA
182 <213> ORGANISM: Artificial
184 <220> FEATURE:
185 <223> OTHER INFORMATION: Primer 260558
187 <400> SEQUENCE: 5
188 gagtatcgcc agtaaggggc g                                          21
191 <210> SEQ ID NO: 6
192 <211> LENGTH: 20
193 <212> TYPE: DNA
194 <213> ORGANISM: Artificial
196 <220> FEATURE:
197 <223> OTHER INFORMATION: Primer UpN 1361
199 <400> SEQUENCE: 6
200 agccgatgcg atcgatgaac                                           20
203 <210> SEQ ID NO: 7
204 <211> LENGTH: 23
205 <212> TYPE: DNA
206 <213> ORGANISM: Artificial
208 <220> FEATURE:
209 <223> OTHER INFORMATION: Primer 260559
211 <400> SEQUENCE: 7
212 gcagccctaa aatcgcataa agc                                       23
215 <210> SEQ ID NO: 8
216 <211> LENGTH: 23
217 <212> TYPE: DNA
218 <213> ORGANISM: Artificial
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RAW SEQUENCE LISTING   DATE: 08/17/2006
PATENT APPLICATION: **US/10/588,298**   TIME: 16:15:46

Input Set : **A:\pto.da.txt**
Output Set: **N:\CRF4\08172006\J588298.raw**

```
220 <220> FEATURE:
221 <223> OTHER INFORMATION: Primer DwC 1361
223 <400> SEQUENCE: 8
224 taatcgcatg ttcaatccgc tcc                                    23
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 08/17/2006
PATENT APPLICATION: US/10/588,298   TIME: 16:15:47

Input Set : **A:\pto.da.txt**
Output Set: **N:\CRF4\08172006\J588298.raw**

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:3,4,5,6,7,8

VERIFICATION SUMMARY   DATE: 08/17/2006
PATENT APPLICATION: US/10/588,298   TIME: 16:15:47

Input Set : A:\pto.da.txt
Output Set: N:\CRF4\08172006\J588298.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

Raw Sequence Listing before editing, for reference only

IFWP

RAW SEQUENCE LISTING   DATE: 08/10/2006
PATENT APPLICATION: **US/10/588,298**   TIME: 09:51:39

Input Set : **A:\01-SQ Listing-15 Aug 2006.txt**
Output Set: **N:\CRF4\08102006\J588298.raw**

```
 3 <110> APPLICANT: Duffner, Fiona
 4        Hoff, Tine
 5        Lundquist, Henrik
 6        Spendler, Tina
 8 <120> TITLE OF INVENTION: Xylanase
10 <130> FILE REFERENCE: 10582-204-US
```
C--> `12 <140> CURRENT APPLICATION NUMBER: US/10/588,298`
C--> `12 <141> CURRENT FILING DATE: 2006-08-03`
```
12 <160> NUMBER OF SEQ ID NOS: 8
14 <170> SOFTWARE: PatentIn version 3.3
```

Does Not Comply
Corrected Diskette Needed
(p3-1)

ERRORED SEQUENCES

```
215 <210> SEQ ID NO: 8
216 <211> LENGTH: 23
217 <212> TYPE: DNA
218 <213> ORGANISM: Artificial
220 <220> FEATURE:
221 <223> OTHER INFORMATION: Primer DwC 1361
223 <400> SEQUENCE: 8
224 taatcgcatg ttcaatccgc tcc                                    23
```
E--> `2304`

deleted

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 08/10/2006
PATENT APPLICATION: US/10/588,298   TIME: 09:51:40

Input Set : **A:\01-SQ Listing-15 Aug 2006.txt**
Output Set: **N:\CRF4\08102006\J588298.raw**

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:3,4,5,6,7,8

VERIFICATION SUMMARY　　　　　　　　DATE: 08/10/2006
PATENT APPLICATION:　**US/10/588,298**　　TIME: 09:51:40

Input Set : **A:\01-SQ Listing-15 Aug 2006.txt**
Output Set: **N:\CRF4\08102006\J588298.raw**

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:230 M:254 E: No. of Bases conflict, this line has no nucleotides.